

REMARKS

Claim 1 has been amended by this paper. Claims 3 and 4 have been cancelled by this paper. Claims 1, 2 and 5-10 remain pending in this application.

Claims 1 and 2 are rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,830,564 to Gray. The rejections are respectfully traversed.

The Gray patent issued on December 14, 2004 and the application maturing into the Gray patent was published on July 24, 2003. The present application claims priority from PCT/JP2003/008180 filed on June 27, 2003. Therefore, the Gray patent and corresponding published application do not qualify as prior art to the present application under § 102(b). Withdrawal of the rejections of claims 1 and 2 is respectfully requested.

Claims 8 and 10 are rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,616,640 to Chen. The rejections are respectfully traversed.

The Chen patent issued on September 9, 2003 and the application maturing into the Chen patent was published on July 10, 2003. The present application claims priority from PCT/JP2003/008180 filed on June 27, 2003. Therefore, the Chen patent and corresponding published application do not qualify as prior art to the present application under § 102(b). Withdrawal of the rejections of claims 8 and 10 is respectfully requested.

Claim 3 is rejected under 35 U.S.C. § 103(a) as being unpatentable over the Gray patent in view of U.S. Patent No. 5,782,804 to McMahon. However, for the reasons expressed above, the Gray patent is not prior art to the present application. Therefore, withdrawal of the rejection of claim 3 is respectfully requested.

Claim 5 is rejected under 35 U.S.C. § 103(a) as being unpatentable over the Gray patent in view of the Chen patent. However, for the reasons expressed above, the Gray and Chen patents are not prior art to the present application. Therefore, withdrawal of the rejection of claim 5 is respectfully requested.

Claim 7 is rejected under 35 U.S.C. § 103(a) as being unpatentable over the Gray patent in view of U.S. Patent No. 4,573,977 to Crawford. However, for the reasons expressed above, the Gray patent is not prior art to the present application. Therefore, withdrawal of the rejection of claim 7 is respectfully requested.

Claims 4 and 6 are rejected under 35 U.S.C. § 103(a) as being unpatentable over the Gray

patent in view of U.S. Patent No. 4,412,836 to Brignola and U.S. Patent No. 5,098,403 to Sampson. The rejections are respectfully traversed.

For the reasons expressed above, the Gray patent is not prior art to the present application and, therefore, the rejections of claims 4 and 6 are not proper.

Furthermore, Applicants note that the Examiner has indicated that the Brignola reference teaches a closing diaphragm having crossing notches in Fig. 18. However, the closing diaphragm of the Brignola reference is provided at one end (piston head) of the piston rod in the cylindrical barrel.

The closing diaphragm 2h (see Fig. 1 (A) and Fig. 2) of the present application is provided at a different position from the Brignola reference. Specifically, in the present application, the closing diaphragm 2h is not at the one end (piston head), but at the other end (opposite end from the piston head). This configuration provides the following function: after use of the syringe, the needle 3 is detached from the syringe and the cap 2e is removed from the piston 2 and the needle 3 is then pushed in against the closing diaphragm 2h. In this way, the needle 3 is received in the hollow portion of the piston rod 2a and the opening storage portion 2d. Since the crossing notches 2g are arranged in the closing diaphragm 2h, the needle 3 cannot be easily taken out.

It is submitted that the Brignola reference fails to disclose the closing diaphragm located at the opposite end from the piston head. Therefore, if a person has modified the device of the Gray patent with the diaphragm taught by the Brignola reference, it would not have been the same or have a similar structure to the claimed disposable injector syringe, which has the closing diaphragm at the opposite end from the piston head.

Withdrawal of the rejections of claims 4 and 6 is respectfully requested.

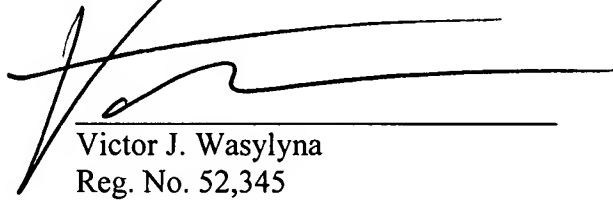
Claim 9 is rejected under 35 U.S.C. § 103(a) as being unpatentable over the Chen patent in view of the Grey patent. However, for the reasons expressed above, the Chen and Grey patents are not prior art to the present application. Therefore, withdrawal of the rejection of claim 9 is respectfully requested.

Accordingly, it is submitted that the application is in condition for allowance and formal notice thereof is respectfully requested.

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Docket No. 550718-00112
Amendment

The Commissioner is hereby authorized to treat any paper that is filed in this application, which requires an extension of time, as incorporating a request for such an extension. (37 C.F.R. § 1.136(a)(3)). The Commissioner is further authorized to charge any fees required by this paper or to credit any overpayment to Deposit Account No. 20-0809.

Respectfully submitted,



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